Title	***Storage Ring Dipole Spare Power Supply***			
Project Requestor	Ju Wang			
Date	04/18/2008			
Group Leader(s)	Ju Wang			
Machine or Sector Manager	Louis Emery			
Category	`Obsolescence/Spares`			
Content ID*	APS_XXXXXX	Rev.	ICMS_Revision	ICMS Document Date

*This row is filled in automatically on check in to ICMS. See Note [1]

Description:

Start Year (FY)	**2008**	**Duration (Yr) 5**	

Objectives:

Procure a spare power supply for the Storage Ring dipole magnets

Benefit:

With a complete spare power supply we will eliminate the risks of extended storage ring operation downtimes that can be caused by a major failure in the existing power supply.

Risks of Project: See Note [2]

None

Consequences of Not Doing Project: See Note [3]

The storage ring dipole power supply is a customized commercial unit. We have not had much reliability issue with this supply. However, this could change soon as the supply is more than fifteen years old. We have a limited number of spare components for general maintenance. We do not have a complete and ready-to-go spare supply. A major failure, particularly in the control electronics, can paralyze the operation for weeks.

Cost/Benefit Analysis: See Note [4]

Failure of this project will keep the ASP operations at the risk of extended downtime, potentially weeks, should a major failure occurs in the dipole power supply. With a spare power supply in standby, a downtime due to a dipole power supply fault can be reduced to just a couple of hours or even less.

Description:

The project is to procure a spare power supply for the Storage Ring dipole magnets and install it in the same room and in a way that the power feed to the magnets can be switched from one supply to the other quickly.

Funding Details

Cost: ($K)
Use FY08 dollars.

Cost ($k)

Year	AIP	Contingency
1	300	10%
2		
3		
4		
5		
6		
7		
8		
9		

Contingency may be in dollars or percent. Enter figure for total project contingency.

Effort: (FTE)
The effort portion need not be filled out in detail by March 28

Year	Mechanical Engineer	Electrical Engineer	Physicist	Software Engineer	Tech	Designer	Post Doc	Total
1								0
2								0
3								0
4								0
5								0
6								0
7								0
8								0
9								0

Notes:

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[1] **ICMS**. Check in first revision to ICMS as a *New Check In*. Subsequent revisions should be checked in as revisions to that document i.e. C*heck Out* the previous version and C*heck In* the new version. Be sure to complete the *Document Date* field on the check in screen.

[2] **Risk Assessment.** Advise of the potential impact to the facility or operations that may result as a consequence of performing the proposed activity. Example: If the proposed project is undertaken then other systems impacted by the work
include ... (If no assessment is appropriate then enter NA.)

[3] **Consequence Assessment.** Advise of the potential consequences to the facility or to operations if the proposal is not executed. Example: If the proposed project is not undertaken then ____ may happen to the facility. (If no assessment is appropriate then enter NA.)

[4] **Cost Benefit Analysis.** Describe cost efficiencies or value of the risk mitigated by the expenditure. Example: Failure to complete this maintenance project will result in increased total costs to the APS for emergency repairs and this investment of ___ will also result in improved reliability of ____. (If no assessment is appropriate then enter NA.)